Employers' Education

Education Coalition Report

Assuring Our Children's Future

The major conclusions of the Employers' Education Coalition are summarized as follows:

- Utah's Public Education (K-12) system faces an impending crisis driven by funding shortages, an enrollment boom, and general employer dissatisfaction with high school graduates entering the workforce.
- Public Education (K-12) needs to refocus on **core academics**, coupled with increased emphasis on establishing a culture of academic achievement and discipline.
- Student progress should be measured more on competency and less on "seat time".
- Increased **accountability** needs to be implemented for students, teachers, and administrators, based on annual progress in core academics, on an individual student basis.
- **Management** of public education should be modified to better align accountability, responsibility, and authority with the execution of the strategy.
- **Funding** of public education needs to be stabilized in the short term and increased in the long term. Education funding must be the state's top priority.
- School choice should be expanded to better allow parents to choose the school best suited to their child's needs.
- **Higher education institutions** (colleges, universities) should have **differentiated roles** within a comprehensive strategy, with funding tied to the strategy and administered by the Board of Regents.

Executive Summary

Utahns have a strong tradition of high commitment to public education, as evidenced by tax rates that are among the highest in the nation and a percentage of the state budget dedicated to education that is also among the highest in the nation. Ironically, however, we have the LOWEST per pupil expenditures in the country, due to our unique demographics – lots of children. As a result, the Utah Public Education system (grades K-12) faces a serious crisis, and all responsible parties (the Governor, the legislature, state and local school officials) must take immediate steps to ensure that a viable education system continues in order to provide for our children's future. Key factors driving the impending crisis include:

- Lowest per pupil funding in the United States, resulting in
 - Largest class sizes in the country
 - Most teachers stretched to their limits
- Extremely limited ability to increase funding in the short term due to the weak national and state economies and the already-high tax rates. The percentage of state expenditures dedicated to Public Education has declined over the past decade, albeit with partial recovery in the last few years.
- Employers generally dissatisfied with the competency of high school graduates entering workforce

Employers' Education Coalition
Fraser Bullock, Chairman
For additional information, contact John Bennion, Project Coordinator
801-212-2112 (office)
john.bennion@saltlake2002.com

- Projected enrollment increase of 70,000 to 100,000 students over the next decade
- Projected increases in ethnic diversity with its associated challenges and opportunities.

Unless these pressures are dealt with now in the form of a clear, workable strategy, then Public Education, and consequently our children, will face a precipitous decline in resources, quality and results.

Utah's colleges and universities face a less severe, but still serious set of circumstances resulting from the limited financial resources of the state, the weak economy, and the impending enrollment boom in higher education as well.

Employers' Education Coalition

The Employers' Education Coalition (EEC) was formed in June of 2002 to take a broad look at this set of problems. The EEC is comprised primarily of representatives of business—heretofore a relatively quiet voice in the debate on education. Yet businesses are "consumers" of the "education product" in that they employ the graduates. The EEC also includes representatives from the Parent Teacher Association (PTA) and a limited number of educators including the Utah Education Association (UEA), the School Superintendents' Association, the Utah School Boards Association, and the State Board of Education. Appendix A contains a list of the EEC participants. The EEC focused on the following issues:

- What are the current situations and trends?
 - How satisfied are employers with graduates?
 - What is the financial viability of the system?
 - How effective is education in Utah from a business process perspective?
 - What happens if nothing is changed?
- What recommendations can improve the future of Utah education?
 - Strategic focus
 - Management authority and processes
 - Internal cost savings
 - Strategic investments

The EEC studied both Public Education (grades K-12) and Higher Education including colleges and universities and the Utah College of Applied Technology (UCAT).

To create effective change, the EEC believes that all groups must come to the table in a long-term partnership. These groups include state and district officials in Public and Higher Education, the Legislature, the Governor, parents, teachers, employers, and other stakeholders. However, each group must be willing to focus first on the education provided to our children, putting as secondary any special interests. This will be the key hurdle to meeting with any success. In its work to date, the EEC has tried to represent the voice of employers in this debate while trying to balance the views of other constituent groups. In particular, the EEC applied business principles to the examination of the issues and the attendant recommendations. While many of the recommendations may not be unanimous, they reflect the vast majority of the group.

As we conclude this report, we recommend that an ongoing EEC be created to advise public and higher education in better aligning the needs of employers and the "output" of Utah's education system.

Public Education

The EEC applauds the tremendous efforts of teachers, administrators, and local school boards in the face of limited resources, recognizing that Utah students achieve average results on national tests. However, the current and even greater future pressures warrant serious concern.

The EEC believes that Public Education faces a serious crisis centered in the following issues:

- 1) Diffusion of the core mission, including proliferation of non-core electives, i.e. schools are being asked to do too much.
- 2) Ineffective management structure and processes.
- 3) Questionable financial viability combined with cost inefficiencies.
- 4) An antiquated system that emphasizes seat time rather than competency.
- 5) Employers generally dissatisfied with the quality of high school graduates entering the workforce.

In Public Education, the EEC believes that the education system has drifted away from its core mission of preparing students with the basic academic skills required for higher education and/or employment. This shift is a result of an unclear mission and strategy driven by pressures to be "all things to all people", an outdated and inflexible system, and an ineffective management structure and process. *The management process is anything but clear. There are "too many hands on the steering wheel," making it unclear who is in charge and who is responsible for what.* The scarce resources in the system end up sub-optimally deployed, and a large portion of the students do not develop the core skills needed to move on to their next step. The EEC recommends fundamental changes be made throughout the education system to better serve the students and more efficiently utilize scarce resources. In addition to internal Public Education funds re-allocated through the changes in support of a focused mission, the EEC also recommends that additional resources be found within the state budget in order to ensure the future viability of Public Education.

Major EEC Recommendations for Public Education (K-12)

· Establish a clear mission, objectives and accountability

- Establish a core mission that focuses on the fundamentals of communication skills, mathematics, and science as a foundation for future learning or employment.
- Establish a pervasive culture based on "learning, measured by results". Many EEC members have lived in other states within the past few years, and have observed a disturbing lack of academic discipline in Utah high schools when compared to other states.
- Establish competency-based advancement, ensuring learning occurs and allowing students to progress at their own ability, including acceleration faster than the norm.
- Create an accountability system based upon standardized testing of *every student every year* in each of the core academic areas. Test scores *must* follow the student so that *core academic progress* can be measured by student, by class, by teacher, by school, by district, and by the state.
- "Raise the bar" in the high school graduation requirements for core academics. Utilizing competency based advancement, students can test out of classes, eliminating the need for just "seat time." However, we must make certain that every student's final high school year is used productively.

• Change the governance structure

- Utilize the strengths of a traditional corporate governance/management model.
- Modify the current management structure to strengthen the State Board of Education/State Superintendent to drive implementation of the mission of core academic progress. Combine accountability with authority.
- With respect to Public Education, clarify the respective roles of the State Legislature, the State Board of Education, the State Superintendent, the local school boards, and the school district superintendents.
- The State Board should be appointed to attract the highest level of talent. Substantial representation from business, education and legislative leadership is essential, avoiding "political appointments." The State Board should select the State Superintendent.
- When incremental state funds become available for investment in education, their disbursement should be managed by the State Board consistent with the core mission of progress in core academics. The State Board should utilize its discretionary funding distribution authority when necessary to encourage districts to follow the core mission.
- Establish an annual reporting and accountability process for the State Board of Education's results in implementing the agreed upon strategy. This report should be made to the State Legislature and to the Governor.

Combine authority with accountability

- Each person in Public Education must receive the power and authority necessary to achieve the desired results in their area of responsibility, and be held accountable for those results.

Set Priorities

- Distinguish "nice to have" expenditures from "must have" expenditures.
 - Focus on core academics as a foundation to future learning or employment.
 - Support a more limited number of electives that contribute to additional competency in core academics, valuable technical preparation and/or a reasonable mix of liberal arts programs. Eliminate other electives as much as possible.
 - Expand "user fees" to cover the full costs of activities that do not support the core mission.
 - Examine "fringe" electives for redefinition as extra-curricular activities, which should cover their own costs.

- Strengthen the financial viability of public education. \$90 million per year in additional funding is the minimum necessary to address critical needs including enrollment growth, class size reduction in core academic learning, remediation, full testing and "R & D." The expenditure of these additional funds by Public Education must be tied to, and used to leverage, the successful implementation of the overall strategy. To secure funding for Public Education, tough choices must be the made, such as deferring expenditures on transportation and/or other infrastructure investments. The Legislature should examine cost savings in other areas to fund education and use a "must have" vs. "nice to have" discipline in fiscal matters. The EEC recognizes these are very challenging times financially and there are no easy answers, but the following principles should be applied:
- 1. Education must be the top priority.
- 2. Cost reductions in other areas of the state budget must be pursued vigorously to provide adequate funding for Public Education.
- 3. The first priority for additional funds for Public Education is to maintain current per pupil funding levels.
- 4. Additional funds beyond current per pupil funding levels should be tied to the performance of Public Education in executing the recommended strategy.

School Choice

- Expand the charter school initiative. The EEC strongly endorses the initiatives of charter schools and New Century schools and encourages even more be done, particularly in the area of facilitating building availability.
- Motivate school districts to facilitate inter-school and inter-district transfers.
- Implement a meaningful tuition tax credit that allows a parent or guardian to choose the optimal format for educating their child, regardless of income level of the family. Make the tax credit available to both individuals and corporations.
- Implement a tuition tax credit that is *less than* the state cost of educating a student. This will *increase* the amount of state funds available per student in the public school system. It will also produce the benefits of competition incentives to meet customer needs and continuously improve.
- Implement testing procedures that allow parents to compare public and private schools in Utah to each other and to existing national standards.

Higher Education

Higher Education in Utah has developed certain recognized strategic assets over time, yet it suffers from the inability to follow a carefully thought out plan. This is due to a lack of a focused strategy needed for these difficult economic times and the pending enrollment boom, an ineffective management structure, and funding mechanisms that create the wrong incentives. The EEC developed recommendations in each of these areas.

Major EEC Recommendations for Higher Education

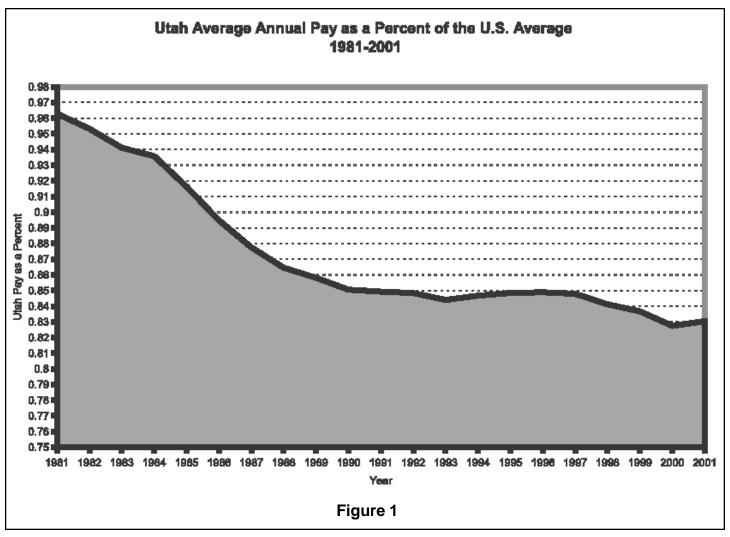
- Define the mission, strategy and objectives of each Higher Education institution that is consistent with an overall strategy for the state and optimally deploys scarce resources.
 - Each institution must stay within the confines of its portion of the strategy in order not to waste scarce resources.
 - Each institution should seek to be the "best in class" in its portion of the strategy.
 - Develop four to six "World-Class Teaching/Research Centers" at the Research I institutions to stretch our level of learning and to attract higher-paying jobs and economic development. Establish a "feeder system" to attract the "best and brightest" high school students into these programs.
 - Partner with business and the State to develop these programs.
- Empower the State Board of Regents to oversee the implementation of the mission, with accountability to the State Legislature.
 - Allow the Board of Regents to deploy all funds consistent with the strategy.
 - Continue to appoint the Board of Regents, but reduce the size to 9 to 11 individuals, seeking the best talent with a mix of business, education and political leadership, avoiding "political appointments."
 - Establish an annual reporting and accountability process for the Board of Regent's results in achieving the agreed upon strategy.
 - Implement zero-based budgeting every three years for each institution, consistent with the strategy.
- Raise tuition to levels consistent with comparable schools in surrounding states and utilize these resources to implement the strategy.

- · Set aside a portion of the new tuition revenues for student aid.
- Increase competency-based entrance requirements to ensure students are well prepared for higher education and motivated to take high school more seriously.

Other Major Recommendation

• Increase state investment in economic development, focusing on attracting high-paying jobs to the state. We cannot state this strongly enough — increased growth of higher-paying jobs is the *only* long-term solution to achieving real per pupil funding increases and allowing our citizens to earn reasonable incomes. This should be implemented in conjunction with the "World Class Teaching/Research Centers" at our Research I universities.

The EEC believes implementing these recommendations will be difficult, yet can have a great impact on education in Utah. The EEC has attempted to take a dispassionate view in its analysis and recommendations, with the only motive to benefit the children and enhance their long-term future in the state. We hope others join with us in a similar approach to encourage real change in facing these difficult challenges. To be successful, we must be innovative and willing to try new ideas.



Introduction

The EEC has concluded that Utah faces a crisis in education and must take immediate steps to ensure a viable education system in the future. Spending per pupil in Utah is the lowest in the country and may actually *decline*, given the combination of a pending enrollment boom and continuing severe budget pressures. Employers generally are not satisfied with the education level of high school graduates and recommend that a much greater emphasis be placed on the core skills. The EEC recommends fundamental changes be made throughout the education system to better serve the students and more efficiently utilize scarce resources.

Regarding its ability to fund education, Utah faces difficult challenges in the current economic environment and has seen resources stretched to the limit. Businesses provide economic fuel to Utah, both in the form of jobs for its citizens and resources for public purposes. Demographically, Utah needs to experience growth in hundreds of thousands of jobs to provide employment for those in the education system. Economic growth must be a central focus, with a clear strategy and corresponding investment.

Utah must undertake a proactive strategy to attract high-paying jobs to the state in order to allow our citizens to earn a reasonable living. As seen in Figure 1, Utah's average wage as a percentage of the U.S. average has declined from 96.3% in 1981 to 83.0% in 2001, resulting in a significant relative decline in resources available to the state and must be reversed in the future.

Tax rates are a key driver of the attractiveness of Utah to businesses and their ability to compete in world markets. Corporate income taxes only account for 9.2% of Utah tax revenues, so reductions or incentives to attract new business investment could be couched as a modest investment to attract future revenues. Utah must have well thought out policies in its tax strategy and in encouraging growth of new business investment by both existing Utah businesses and those considering re-location to Utah. Tax policy can be used to create an "upward spiral" of attracting new business investment, resulting in more high-paying jobs, more tax revenues, and lower tax rates, leading to a more attractive environment for even more business expansion.

This should not be construed to suggest that the EEC condones "special interest lobbying" for tax breaks. Tax incentives should be selectively employed to attract jobs to the state that are above the Utah average wage of approximately \$32,000 per year.

A highly educated workforce and a quality public education system are additional selection factors encouraging businesses, especially those with high-paying jobs, to locate in the state. This underscores the importance of wise investment in public education, in order to ensure Utah's economic vitality in the future.

The EEC believes that economic development is vital to the state and insufficient investment has occurred. Many families struggle to make ends meet, and with tens of thousands of new graduates (both high school and college) entering the workforce every year, economic development must expand. The EEC recommends that Utah re-examine its approach to economic development and then makes a serious commitment to strategy formulation and funding. Second, Utah must not undertake actions that would *discourage* businesses from moving into the state or from remaining and growing here. Some advocate simply increasing taxes to alleviate the current and future funding pressures on the education system. However, the EEC recognizes that business prosperity and economic development drive the availability of funds and unfavorable tax policies can be highly damaging to business prospects, *and even discourage companies from relocating to Utah or remaining here.* Therefore, the EEC is disinclined to consider tax increases until (a) all current resources are utilized efficiently in support of the re-focused strategy, and (b) all trade-offs within the state budget are thoroughly considered.

Public Education in Utah

The citizens of Utah face serious challenges in Public Education (grades K-12) over the next decade. A confluence of different elements is, and will be, exerting pressure on the system that puts Public Education at serious risk. These influences include the lowest funding per pupil in the country, extreme State budget pressure with an uncertain future, a pending enrollment boom, increasing diversity and its related needs, implementation of "No Child Left Behind," and the employer community expressing dissatisfaction with too many of our high school graduates. *Unless these pressures are dealt with now, in the form of a clear, workable strategy, then Public Education, and consequently our children, will face a precipitous decline in resources, quality and results.* This conclusion is particularly important in light of the current forecast that between 70,000 and 100,000 net new students will be added to Utah's schools over the next ten years, potentially increasing the public school population from 466,000 to 566,000, or by 21.5%. This rate of increase is markedly greater than that experienced over the previous decade when the public school population grew by only 2.4% from 455,000 in 1992 to 466,000 in 2002. *The Employers' Education Coalition (EEC) believes that Public Education in Utah faces a serious crisis of financial and operational viability.* The EEC has prepared recommendations that can make fundamental changes in education in Utah to best prepare our children to enter the workforce or move on to Higher Education (post-high school education).

The EEC recognizes that the Public Education system is massive, complex and very difficult to change. The EEC also recognizes that problems faced today are systemic, have many causes, and are not the fault of any one particular group. In addition, the education expenditures in Utah are the lowest in the country on a per pupil basis, yet Utah students achieve average test scores. To date, the commitment of the state, districts, teachers and parents has allowed Utah's students to achieve these results in spite of the nation's severest resource constraints. We applaud the youth of Utah, and we especially applaud the efforts of teachers working with them every day with the most limited resources in the country—they are the day to day "heroes" of Public Education. With committed teachers and involved parents working with our youth, the future can be bright. However, without change, we believe that the current and impending pressures will overwhelm even their best efforts. Accordingly, teachers and administrators need to recognize the need for and desirability of change.

The Utah Foundation worked in concert with the EEC to carefully identify trends in Public Education and the consequential risks now at hand. The key conclusions from this work are:

- Utahns pay a high tax burden (15.2% including fees, state and local taxes, which is 9th in the nation), and large shares of tax revenues (46.8% of state and local taxes and fees, which is 4th in the nation) are dedicated to Public and Higher education.
- Despite the high funding effort for education, per pupil funding is the lowest in the nation, and class sizes are the largest.
- Utah students perform at an average level on standardized tests, but most Utah racial groups, including white students, are scoring below average compared to their racial group nationally. These counter-intuitive mathematics derive from the facts that (a) whites typically score higher than other ethnic groups, and (b) Utah is overwhelmingly "white".

- The economic boom of the 1990s brought unusually favorable conditions for public education, allowing increased per-pupil funding and lower class sizes. These conditions will not be repeated in this decade.
- The proportion of state spending dedicated to K-12 education fell in recent years, as increased funds were directed to capital projects.
- If the economy grows slowly, education funding will not be able to keep up with enrollment growth.
- The new "No Child Left Behind" law at the federal level will require increased effort and changes to Utah's education system.

Certainly one of the most alarming conclusions is "If the economy grows slowly, education funding will not be able to keep up with enrollment growth." In fact, the Utah Foundation's models show that in the event of slow economic growth, spending per pupil will decline from an already low base unless action is taken. The national and Utah economies continue to struggle, resulting in shrinking government revenues. As in other states, our state budget has suffered several reductions and the EEC sees no reason to make optimistic projections. Utah continues to face a budget crisis and must be prepared for similar trends in the future.

The EEC conducted a non-scientific survey of 95 businesses in Utah to determine their level of satisfaction with high school graduates. While there are certainly some graduates who are high-achievers realizing success in higher education, those entering the workforce from high school do not, by and large, have the basic skills employers seek. The employers are especially dissatisfied with skills in communication and math, and their application in the real world of work. One enlightening quote from the CEO of one of the largest high tech employers in the state is, "I just want someone who can fill out an application." Another employer commented, "Our math test, which just tests for addition, subtraction, multiplication, and division, has a dismal 30% pass rate." Employers also noted that a general lack of basic skills needed in the workforce are missing, which includes dependability and teamwork. These results prompted the EEC to carefully examine many aspects of the education system, beyond the financial resources problems.

The EEC believes there are serious fundamental issues in the following areas:

- Lack of a clear mission, objectives and accountability.
- Ineffective management structure.
- Ineffective prioritization based on limited funding.
- Shortage of needed funding in the face of a deteriorating budget situation.

In each area, the EEC has examined the issue and developed specific recommendations.

Mission, Objectives and Accountability

Current Situation

It appears the Public Education system has drifted away from its core mission. The cause of many business failures is losing sight of the core mission and delving into peripheral activities that distract focus and resources. What is the core mission of Public Education? Stripped of everything else, it needs to embody preparing students academically to succeed in the next phase in life, whether it is work, technical training or higher education. It appears that many school programs are designed to take care of societal problems. In 1983, a landmark report on education was issued, entitled, "A Nation at Risk." It included the following insight 19 years ago: "Our society and its educational institutions seem to have lost sight of the basic purposes of schooling, and of the high expectations and disciplined effort needed to attain them....That we have compromised this commitment is, upon reflection, hardly surprising, given the multitude of often conflicting demands we have placed on our Nation's schools and colleges....We must understand that these demands on our schools and colleges often exact an educational cost as well as a financial one." Manifestations of the lack of focus on this core mission include: extensive remedial education in higher education, dissatisfied employers, below-average test scores (adjusted for ethnicity), proliferation of electives of questionable value, dominating extra-curricular activities, and low academic requirements for high school graduation. The Utah high school diploma has lost much of its value as an indicator of achievement and/or competence. It is time to reprioritize and focus on the core mission.

A comparison of Utah's high school graduation requirements in core academic subjects as compared to leading states in test scores and as compared to the minimum recommendations of "A Nation At Risk" are seen below:

High School Graduation Requirements (years)

	•	ŕ			Recommended in
	$\underline{\mathrm{UT}}$	<u>TX</u>	\underline{MD}	MA	"Nation at Risk"
English/Language Arts	3	4	4	4	4
Math	2	3	3	3	3
Science	2	3	3	3	3
History/Social Studies	<u>3</u>	3.5	<u>3</u>	<u>3</u>	<u>3</u>
Total "Core"	10	13.5	13	13	13

With total requirements varying district by district between 24 and 27, one can see that the core requirements are about 40% of the total – evidence of a significant drift from the core mission of education. Furthermore, with modifications in class scheduling, including block scheduling and reductions in days taught per term, the time devoted to core academic subjects has actually *declined* over the past decade.

It appears that Public Education is attempting to do too much, a fundamental strategic error in the face of extremely limited resources. A lack of focus on the core mission in turn leads to a lack of supporting objectives and tangible guidelines for day-to-day efforts.

Some of the more indicative cases of straying from the core mission are found in the electives offered for credit in high schools today. These include flower arranging, aquarium management, fashion strategies, sports sewing, cheerleading and general crafts. These represent the tip of the iceberg. No doubt an individual could make an impassioned plea for receiving high school credit for each of these, and other, areas. While some electives (e.g. Journalism, Expository Writing) complement the core academic curriculum, too many do not. When our students lack basic academic skills, we must turn to instituting a "must have" versus "nice to have" mentality. Non-essential electives siphon off resources and, in many cases, have smaller class sizes, resulting in *larger* class sizes in core academics. Clearly, the core mission has become muddled.

Core Mission Recommendations

A mission statement must facilitate making tradeoffs inherent in difficult decisions. For example, the following mission statement accomplishes this purpose:

"Prepare each student for his or her choice of higher education or gainful employment, focusing on the core academic skills of reading, writing, science, and mathematics, balanced with exposure to the arts, and encouraging them to become life-long learners. Furthermore, train students in selected key attributes required for successful living: integrity, dependability and teamwork."

A comprehensive strategy must then follow the mission statement with carefully thought out objectives, such as "achieve above average test scores by ethnic group." At the heart of this strategy must be demonstrating competency in core academic subjects. We also believe that the opportunity to achieve competency in core academics is what should constitute a "free public education" as mandated by the Utah constitution. Along these lines, the EEC recommends the following objectives:

· Academically prepare students for higher education and/or gainful employment

- Focus on key academic skills especially communication, science and math.
- Establish clear learning requirements at each grade level in core subjects for K-16, and align Public Education with Higher Education. The area with the greatest concern, communication, is defined as grammar, reading, writing, vocabulary, spelling, and speech. These basic building blocks must take first priority in English classes. While the EEC agrees the study of literature is important, it must not be taught at the expense of mastery in grammar, vocabulary, and writing. For example, a full year of immersion, or perhaps demonstrated mastery in grammar and vocabulary should be the first foundation to secondary education, followed by a comprehensive writing course, focusing on analytical writing, technical, and persuasive writing.
- Focus math skills on application of the concepts taught. Not every student needs to understand calculus, but needs to understand how to apply math principles to solve "word problems" in real work settings.

- While some other subject areas (e.g. history, social studies, art, music, and foreign languages) are also fundamental to a quality education, they must complement the core academic subjects highlighted above and receive priority over the elective courses that often dominate a student's schedule. The courses should also stretch the minds of the students and encourage them to become life-long learners, not just parrots of facts.
- Demonstrate competency. Ultimately, students are to develop and demonstrate competencies in core areas. Competency must become the new measure for advancement, replacing "seat time." Such a change is fundamental to the system, but is the only assurance students are actually learning the required material and are ready to move ahead. A high school diploma should have real meaning in the form of clearly articulated and demonstrated competencies. The EEC believes this is one of the central elements to the Public Education strategy.
- Increase graduation requirements in core academics as outlined below. When comparing these requirements to other states in the country, Utah is at the low end of the requirement scale. Based on a survey completed by The Council of Chief State School Officers (CCSSO) in 2000, 36 states require 4 English credits, 25 states require over 2 credits of Math, and 20 states require over 2 credits of science. If basic applied math skills are mastered, the additional math requirement could be completed with a variety of useful applied subjects such as personal finance, statistics, computer programming, or pre-engineering. Studies have shown that students are more likely to succeed if they have a rigorous high school curriculum. These requirements should reflect years of study, given the variability in the definition of credits.

	Current	<u>Proposed</u>
English/Lang. Arts	3	4
Math	2	3
Science	2	3
History/Social Studies	3	3

- Utilizing competency-based advancement, students can test out of classes, eliminating the need for just "seat time." However, every student should have courses in math, science, communication, and history at the core of their program *every year* in high school.
- The final year of high school in most cases is almost a wasted year, as discussed in "Raising Our Sights" (National Commission on the High School Senior Year, final report, October 2001; available on the web). Currently, most students finish core requirements before twelfth grade and end up with questionable electives the final year. During this underutilized time, students actually lose proficiency in core academic subjects when they are about to enter higher education or the workforce. The final year in Public Education should be skipped or spent productively, honing academic skills in math, language arts and in applied complementary subjects.
- Develop "soft skills." Skills in teamwork, accountability, responsibility, and integrity need to be taught and reinforced in the school environment. Basics such as showing up on time are essential to future success. As one employer states, "the workplace isn't as forgiving as the school environment." As part of teaching students accountability, responsibility, and integrity, school campuses should be "closed", and cutting classes should not be tolerated to the extent that it is today. EEC members who have lived recently in other states have observed qualitatively, but first-hand, that Utah high schools are far more permissive than schools in many other states, where campuses are closed and cutting classes is not tolerated to the extent that it is in Utah. Utah may be known for having relatively strong families and responsible students, but Utah families can and should expect more support from public education in reinforcing disciplined academic behavior.
- Reduce electives (see Funding section for more detail).

• Establish standards, assessments and accountability at all educational levels and for each constituent group.

- Standards and assessments are currently in development, but should be made consistent with the above objectives. As described above, each grade should have clear requirements for learning in each core subject for each grade. Testing will assess progress against those requirements in order to measure the performance of individual students, teachers, schools, districts and the state.
- Accountability, in turn, requires that certain actions be taken based on these measurements, such as rewards for significant progress and remediation for those falling behind. Careful planning should be dedicated to developing accountability actions for each constituent group.

- Test results should be tracked *on an individual level*, allowing for measuring progress of individual students, which adjusts for mobility and special circumstances. Measurement and accountability systems are the true foundation to measuring progress, and their accuracy will be diluted without individual tracking. This is particularly true in measuring the effectiveness of individual teachers, schools and districts. If many of their students are significantly behind to begin with and there is a substantial changeover in students, average class test scores have less meaning. Accountability measures must be based on *individual student progress*, or as in business terminology, the "value added."

· Provide all students the ability to learn at their own optimal rate.

- Remediation programs must be available for those falling behind. Many times, these individuals are passed on to the next class or grade and fall even further behind, ultimately resulting in self-esteem issues, higher drop-out rates and a potential permanent lack of skills. Competency-based assessments and advancement address these problems. In addition, "No Child Left Behind" legislation requires remedial resources be in place. Currently, there are limited resources for remediation. The EEC recommends that investments be made in remediation, including additional teachers focused in grades 1-3 to help those needing assistance in core subjects. Innovation in competency-based learning techniques can and should be effectively applied in remediation programs, to aid students in getting back on track as quickly as possible. The EEC received from educators several innovative ideas in this regard, such as:
 - Each second grader should have writing samples that demonstrate grasp of writing concepts, phonics, and whole word recognition.
 - Each third grader should be able to read and write across subject areas, and do basic addition, subtraction, multiplication, and division.
 - By the end of third grade, all students performing below grade level in reading, writing, and/or math should receive remediation.

We feel that standards such as these should be developed and implemented.

- For those seeking to learn at a faster pace or with special interests, the EEC supports two new initiatives and believes they should be significantly expanded through additional funding.
 - First, competency-based learning would fundamentally shift progress measures from "seat time" and the Carnegie Unit, to demonstrated competency. Students could advance as fast as they are able or take as long as they need. The EEC recommends an investment be made in developing systems to deliver competency-based learning, beginning with pilot programs.
 - Second, the EEC supports the strategy of "magnet schools" and encourages further funding and expansion at a reasonable rate. Students with an interest in technology-related or other fields are able to immerse themselves in such subject matter in high school instead of waiting for university. As students advance, they will be able to earn an Associate's Degree during their high school years.
- **Improve classroom instruction.** Ultimately, learning happens in the classroom and a well-thought-out strategy regarding improving classroom instruction is essential to long term improvement. Some components of that strategy are listed below:
 - Attract and retain outstanding individuals. Reasonable compensation for teachers is necessary to attract individuals to a career in teaching. Compensation for teachers in Utah today is about average for the region and near the top when benefits are considered. While major compensation changes are not appropriate given these comparisons, increases to keep up with inflation are recommended. However, with the adoption of accountability measures for "value added" to individual students, opportunities should be created to recognize/reward/retain teachers and/or schools with the greatest abilities to "add value" cost-effectively to the largest numbers of students. Value-added metrics will permit teachers to tackle difficult teaching environments without risking their careers.
 - Individuals from other professions should be able to enter the teacher workforce in an efficient, streamlined manner. A strategy must be developed to allow capable individuals, such as retired government or military workers, business executives or experts from the scientific community who are seeking career changes, to quickly and readily become part of the education system and receive appropriate pedagogical training. Certification, accreditation, and licensing programs should be reviewed to ensure that they facilitate, not hinder, the recruitment of talented individuals.
 - Provide professional development plans. Provide free tuition at state universities for continuing education in the teachers' area of instruction; expand mentoring programs and provide opportunities for learning best practices in instructional methods. Explore developing a "World-Class Teaching/Research Center" at one of Utah's Research I universities in the

area of preparing teachers as one of the strategic investments of Higher Education.

- Hold teachers accountable for their work. Reward those who excel, but have a clear path for remediating or terminating poor teachers. *Too many poor teachers remain in the system*, either staying where they are or being recycled to other schools or districts. As previously mentioned, value-added metrics implemented on a student-by-student basis will help distinguish between "students who have difficulty learning", "teachers who can't teach", and "administrators who can't manage."
- Explore innovative approaches to financial incentives for teachers, schools, and/or districts for excellent teaching, based on the recommended value-added metrics. For example, compensation increases should be based on consistent achievement of value-added results, not time in service. Incentives could also be granted for accelerating students' learning faster than the norm, producing results with large class sizes, and other measures of competency-based excellence.
- Increase parental involvement. Fortunately, many parents are highly involved with their student's education. Their involvement can be expanded by further encouraging them to assist in the classroom, especially in an environment of large class sizes. Parents should also have ready access to student monitoring data. Many of these exist today, but should be universal across the state. These include web access to attendance, homework status and overall grades. They should be expanded to include the recommended individual student progress tracking system, which allows monitoring of teacher, school, and district performance as well as individual student progress. Parent-teacher conferences and parent/ student/ counselor sessions are a foundation to fostering communication and all parents should strongly be encouraged to attend. Parents and teachers should be aligned in the goal of educating a child with key skills, not just achieving grades.
- Seek for continuous improvement in the system. The Utah Board of Education should foster sharing of best-demonstrated practices from across the state and across the country. In addition, a modest amount of the budget should be dedicated to "research and development," or pilot programs such as competency-based learning, small schools, distance learning and business partnering. Charter schools may be appropriate places for pilot programs to be evaluated prior to more extensive roll out.

Management

Current Situation

The business community believes that management is the most important determinant of success in an enterprise. In the case of Public Education in Utah, the management process is anything but clear. There are "too many hands on the steering wheel," making it unclear who is in charge and who is responsible for what. Further complicating the situation is the division between central and local responsibility and control. Is the State in charge or is the District? For what responsibilities? The EEC believes that Public Education is a joint venture between the state and local communities. Unfortunately, joint ventures are inherently difficult to manage. There has also been a fundamental breakdown in trust involving the Utah Legislature, the State Board, the State Superintendent, the Districts and the UEA. As a result, the Legislature attempts to micromanage Public Education, including proposing approximately 95 pieces of education legislation every year, 45 of which pass and 22 of which become reversed or modified with two years. How can anyone expect to effectively manage a complex system such as Public Education in the face of these challenges?

Recommendations

The EEC examined many other states across the country to determine if any state has solved this complex management issue and found no magic solutions. Management of Public Education is complicated due to its central/local nature and the challenge is optimizing that mix of responsibilities. Nevertheless, the EEC believes that the recommendations below will contribute to improved management of Public Education.

There must be a clarification of roles and responsibilities for the Utah State Legislature, the Utah Board of Education, the State Superintendent of Public Instruction, and the local school districts and a coherent management structure developed. The business world relies on the structure of a Board of Directors combined with a CEO and a management team, which are empowered to develop and execute strategy. While elements of this structure are in place today, roles are unclear and little true power lies with the Utah State Board of Education or the State Superintendent of Public Instruction.

A key component of success includes involving talented people at all levels. *Talented management is a key foundation of the strategy*. It takes a great deal of work and effort to find and attract excellent people, but it is worth the effort.

The EEC acknowledges the historical mission of the **Utah State Legislature** to establish the educational system and to provide the overall educational vision and mission for Public Education. It should also provide the appropriate level of funding to accomplish the mission. The Legislature should then rely on the State Board of Education and State Superintendent of Public Instruction as management and education experts to determine how to implement the mission, and hold the State Board accountable for the results. All new legislation relating to educational standards should come with the coordination of the State Board of Education.

The Utah State Board of Education should:

- Develop high-level strategies, goals and objectives for public education, with particular emphasis on core subjects.
- Prioritize the allocation of funding to best meet the goals and objectives.
- Ensure there are proper assessments and measurements of the actual results against the goals and objectives. In other words, align responsibility, authority and accountability.
- Receive the legislative authority necessary to accomplish its major tasks as outlined above, including the authority to use incentives and other conventional business management tools.

The State Board should present its strategy annually to the Legislature and the results compared against the strategy. It should also focus communication efforts on key issues that require new legislation.

The State Board should be comprised of a mix of highly capable business people and educators, all of whom are dedicated to improving public education. Since many such people are reluctant to run for office, and to ensure the proper mix of education experience and management expertise, the EEC recommends that the State Board be appointed, perhaps in a manner similar to the School & Institutional Trust Lands Administration Board:

- a nominating committee comprised of business people and educators;
- each board seat designated by legislation for a particular expertise;
- staggered terms:
- two candidates selected by the nominating committee for each seat;
- selection by the Governor;
- ratification by the Senate.

The suggested mix of the Board is equal numbers of business people and educators. A member of the House and a member of the Senate should be appointed as liaisons to the State Board of Education to facilitate communication.

The **State Superintendent of Public Instruction** should:

- Be appointed by the State Board and ratified by the Senate. The State Board should always appoint the most capable CEO/Superintendent available and compensate him/her accordingly. This change should only be implemented if the State Board is appointed. If the State Board remains elected, the State Superintendent should be appointed by the Governor and ratified by the State Board and the Senate.
- Implement the strategy, goals and objectives of public education using verifiable incentives and other standard management practices;
- Control all incremental funding above the current WPU;
- Be accountable for assessment and measurement of student progress;
- Hire a highly talented management team;
- Report to the State Board of Education.

The State Superintendent should be responsible for managing a system that is driven by greater statewide consistency, competency-based educational processes, and much more emphasis on results. This structure is mandated by the need for better results, the need for more performance parity across diverse student groups, and the ever-increasing mobility of students across schools and districts.

As part of implementing the strategy, the State Superintendent should run an office that is fully integrated with the 40 school districts. The Superintendent is the communication link with the local districts. Certain activities are far more cost-effective when done centrally and these opportunities should be pursued, such as:

- Develop core curriculum and graduation requirements that are consistent across the districts.
- Select the textbooks and materials that best correlate to the core curriculum and graduation requirements for the districts.
- Prepare professional development programs for teachers (relative to the required courses).
- Prepare professional development programs for local superintendents and principals. Training is essential for these key managers.
- Develop assessment methods, measure test results and follow up on remediation programs.
- Develop a method of creating individual student targets and development plans.
- Develop a method of measuring an individual student's performance toward those targets.
- Establish metrics for ongoing performance evaluations of districts and schools that provide incentives to achieve the desired outcomes and which do not create disincentives for setting high goals for the students. Develop an annual "report card" for school and district performance, measuring learning and reporting value-added.
- Establish a systematic method to encourage innovation in the districts and local markets as they strive to achieve improvement in their performance.

An additional crucial responsibility of the Superintendent is to direct an effort to derive and share knowledge and "best demonstrated practices" from the local school districts. These best practices can encompass teaching techniques, achieving results, school and district management, cost management, efficiency measures, etc. The study of best practices should span traditional public schools, charter schools and private schools. The Superintendent should also seek best practices outside the state to constantly strive to higher performance.

To give clout to the roles of the State Board and State Superintendent, they must have some real funding authority. Financial incentives provide a tangible means to ensure local districts follow key components of the education strategy. Many examples are possible, such as

- rewards for excellence as measured by the value-added metrics
- incentives to minimize school construction costs
- incentives to use the state-approved textbooks
- incentives to reduce electives and focus on core academics
- incentives to use buildings year-round

The 40 local school districts should:

- Implement the core curriculum utilizing their selection of approved instructional materials.
- Administer tests, which measure the outcomes (performance of each student), and coordinate with the State Superintendent
 and State Board to assess results and create plans to improve their performance which will be submitted to the State
 Superintendent's office for approval.
- Using value-added metrics, identify failing schools, teachers, and students, and utilize state and local resources to make remediation a focal point. These assessments should be based upon value-added metrics, not the average test-score performance in the district or school. In this way, districts that begin with a large number of academically disadvantaged students will not be penalized. Rather, these units will have a positive incentive to compete with districts and schools who are starting with a more advantaged population. Value-added measurements can also be adjusted to account for the challenges associated with high levels of student mobility.
- Develop "early warning systems" for students (or classes) failing to make progress. For example, evaluative tests might be administered as often as weekly in grades 1-4 to track progress in the development of basic reading, writing, and math skills.

- Work with the State office to establish a library of documented "best practices" for use by the local districts. By sending their best resources to the State Office and capitalizing on what the State Office has received, each district can benefit from working together to improve the structure.
- Coordinate with the state and Higher Education to develop and implement training programs for school administrators. The
 programs should include basic management training, best practices in instructional methods, budget training, staff management,
 managing for learning results, and how to help every child achieve optimal learning in core academics. Included in staff
 management must be a clear process for terminating poor teachers. Too many poor teachers remain in the system, harming
 the progress students, due to lack of a clear, implementable process, principals' experience, or training.

Setting Priorities

Current Situation and Recommendations

The EEC believes that with the serious pressures facing the education system and the extremely limited resources, a strict discipline needs to be applied, separating the "must haves" from the "nice to haves." Based on employer dissatisfaction with basic communication and math skills, and below-average test results for most ethnic groups, it appears far too many resources are poured into the "nice to have" environment. However, the state has fewer resources on a per pupil basis than any state in the country and must apply a "must have" discipline. For this approach to succeed, each constituent group must set aside its particular agenda to focus on the critical areas of success to appropriately educate our children.

There are many manifestations of poor deployment of resources in Public Education. Extravagant expenditures on school facilities, and a proliferation of electives and extra-curricular activities all divert resources away from the core mission of academic training. The "must have" versus "nice to have" approach must be employed within the schools. Why is it that we fund expensive buildings, certain questionable electives and extracurricular activities while children in elementary school struggle with class sizes of 30? Is it logical to have electives such as aquarium management, flower arranging, and cheerleading in this environment? Nobody appears to want to make the hard choices and align spending with the core mission. This is difficult since there is an advocate for every program or activity, yet the resources are simply not there to do everything. There is constant clamoring for more spending on education, but when resources are poorly deployed, it diminishes the motivation to increase funding. The first priority must be to carefully demonstrate proper fiscal management and focus resources on the core mission.

Many electives play an important role in preparing students for future employment or expanding their exposure to the arts. These are worthy objectives, but must not get swallowed up in the proliferation of electives that are squarely in the "nice to have" camp. One controversial example of a "nice to have" is Drivers' Education. This program not only costs the state over \$4 million a year, it also requires extensive resources in driving ranges, instructors, and time and effort. It further dilutes focus from the core mission. The private sector can provide these services. One argument in favor of Drivers' Education and other electives is that rural students don't have as many alternatives if these programs are cut. But once again, a "nice to have" vs. "must have" standard must be applied. Urban or suburban or rural, these types of programs do not fit the core mission of public education. The valuable electives must be carefully monitored to ensure that they are compatible with an overall strategy consistent with the mission and objectives, and not be allowed to "creep" and expand into other areas as they have in the past. Again, the point is not to eliminate worthwhile activities, but to let others, including the private sector, assume responsibility for these tasks.

As part of assessing the fit between the current teaching profile in Utah and the recommended "back to basics" core mission, the EEC categorized Utah's full-time equivalent (FTE) teaching resources for grades 7-12 as shown below. Each category includes electives that are directly related to the subject area.

English (Language Arts)	1,560	12%
Math	1,188	9%
Science	986	8%
History/Social Studies	1,086	9%
Foreign language	432	3%
Art & Music	695	2%
P.E. & Health	771	6%
Special Education	963	8%
Other	<u>4,857</u>	39%
Total	12,538	FTE Teachers

From the above table, we see that about 39% of our teaching resources are being expended in non-core areas. Although many of these non-core electives are in valid areas of applied technology education, and more detailed analysis should be performed, clearly there is room for re-focusing on a more narrowly defined core mission. While it is common practice to blame state and federal mandates for de-focusing public education from its core academic mission, it appears that some combination of funding policies, local pressures, and lack of a clear mission contribute significantly to this proliferation of electives. As evidenced by its very existence, each course has its ardent supporters, but in difficult economic times, difficult choices must be made. Many of the courses are justified by "the demands of the job market", but the EEC feels strongly that the Utah economy will be better served by more high school graduates with improved competencies in core academics.

While extra curricular activities are a vital part of the Public Education experience, the EEC believes that too many resources are dedicated in this area. There are many worthwhile activities, but why must public education support them? Many of these could be turned over to the community to find private sponsors or raise local taxes. Extra curricular activities have expanded at an astounding rate. These activities use valuable resources, and in many cases distract from the core mission of Public Education. In football, for example, two periods a day can be taken to support this activity, including weight training and practice. Supporting these activities outside of the school block is one thing; taking two periods a day is another matter. The EEC recommends the support of extra curricular activities via electives be eliminated. Certainly some core activities are part of the school experience, but many others should be eliminated and turned over to the community. Extra curricular activities should be self-funding. Those who participate receive the benefits and should fully fund the programs. While some argue that existing fees cover the costs, they typically only cover the variable costs or just part of the variable costs. Mandated fee waivers should be factored into the overall costs.

Setting effective priorities in the face of extremely limited resources is a "must have" for Public Education to succeed through the upcoming difficult years.

Funding

Current Situation

As outlined in the research report by the Utah Foundation, Utah is last in the country in funding per pupil, resulting in fewer resources and the largest class sizes in the country. In the face of an enrollment boom, increasing diversity, "No Child Left Behind" and a stagnant economy, these challenges are staggering. More alarming, in a slower growth economy, the forecast of the Utah Foundation shows a *decline* in the amount of per pupil funding. If anything, Public Education needs *more* funding to meet the looming challenges. The EEC believes that this is a real education crisis and that hard choices must be made.

The economy continues to suffer negative growth, which translates into weak or negative state tax revenue growth. The state continues to incur budget deficits: \$44 million in FY2001, \$395 million in FY2002, and \$298 million to date in FY2003, with \$117 million as the latest forecast deficit for the FY2004 budget. While Public Education has escaped the same level of budget cuts as state agencies, it has suffered from small increases in state appropriations: \$1.683 billion in FY2003 compared to \$1.655 billion in FY2001, a mere 1.7% increase over two years, less than inflation.

With the assistance of the Utah Foundation, the EEC has attempted to quantify the funding problem facing Public Education. Assuming 2% real growth in the Utah economy and the mid-point in the projected enrollment increase, *real funding per student will decline each year, resulting in \$208 per student less ten years from now.* (See figure 2 on following page)

This decline in funding per student will result in a funding gap of \$117 million per year in 2011-12. And, merely closing this gap would do nothing to address improvements such as actually decreasing class sizes, providing remediation resources, or other needed investments.

Recommendations

"MUST HAVE" (\$120 million = \$30 million internal re-allocation plus \$90 million new)

• Maintenance of current per pupil funding levels. By the end of the next decade this is projected to be about \$117 million per year due to the enrollment boom over the next ten years. For FY 2003-2004, the projected one-year increase in enrollment will require \$16.3 million (\$3,573 x 4,554 net new students; both figures from Utah Foundation Report on school funding from state sources).

- Remediation. There are many programs which today are essentially remediation, such as ESL, "resource", some components of special education, "Youth in Custody", and others. However, incremental remediation focused on high school students in math and English can be accomplished quite cost-effectively by introducing summer school classes taught by current teachers in current facilities. For example:
 - 1 math teacher, 3 classes per day, 30 students per class, for one month = \$3,000
 - 1 English teacher, 3 classes per day, 30 students per class, for one month = \$3,000

Using this approach, 50% of all Utah students in grades 9-11 could receive one month of summer school remediation in either math or English for a total cost of \$1.7 million. The EEC recommends an incremental \$2 million be dedicated for this purpose.

- Teacher training. Current teacher training funds (teacher preparation days and staff development days) are \$59 million, but that figure needs to grow by about 2.5% per year (\$1.5 million) in order for the number of teacher training days to remain constant. The EEC recommends an incremental \$2 million per year in teacher training, which is integrated with the re-focused strategy of progress in core academics and assessed via value-added metrics for students, teachers, schools, and districts.
- Reduced student/teacher ratios in grades 1-3 and in core academics in grades 7-12. In order to decrease class size by 20% in grades 1-3, and math and English in grades 7-12, an additional 1,795 teachers will be needed 1,223 teachers at the 1-3 grade levels, and 572 math/ English teachers for grades 7-12. At an average cost of \$52,000 per teacher, an investment of \$93 million is required. Some portion of that investment can be realized

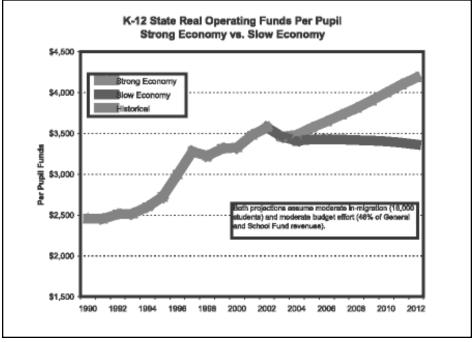


Figure 2

"within the system", by (a) allowing teachers to re-certify into core academic areas; (b) attrition, with new hires coming in the targeted areas; and (c) elimination of some of non-core electives, with funds re-allocated to hiring new teachers. While further study is recommended, the EEC recommends that the additional math/English teachers be obtained via resource re-allocation within the system, while the additional teachers for grades 1-3 be new hires. This implies an internal resource re-allocation of \$30 million and incremental funds of \$63 million. The EEC recognizes that the internal re-allocation process is likely to be both time-consuming and painful, but once again, difficult choices must bemade in times of crisis.

- Development of an **individual student progress measurement** system, resulting in value-added metrics. The EEC has not conducted a thorough assessment of the UPASS system, but we have been informed that its design will accomplish the EEC's objective of value-added metrics, wherein individual student progress in core academics is tracked every year for every student. The one refinement that the EEC recommends is that the UPASS test results be "benchmarked" against widely administered national tests, such as NAEP (National Assessment of Educational Progress), so that Utah can track its performance relative to the rest of the country. By judicious use of statistical sampling for national testing, this should be achievable with insignificant incremental investment.
- Competency-based educational processes. The EEC believes that innovative use of competency-based education processes may allow Utah's students to excel in spite of the severe financial constraints inherent in our public education system. Recent developments in computer-assisted competency-based education show considerable promise in (a) allowing students to progress at their own rates, and (b) significantly reducing costs by reducing seat time requirements. The EEC recommends that a \$2 million R&D fund be established to implement innovative proposals on a pilot basis, with the goal of fundamentally changing both the quality and cost of public education in Utah.
- **Classroom materials and supplies.** Approximately \$4.5 million would provide every teacher an additional \$1 per school day for extra paper, photocopying, etc. Today, many teachers take these expenses out of their own pocket.

"NICE TO HAVE", but still critical

- The innovative **New Century schools** should be expanded when finances permit. If the competency-based pilot programs prove successful, the New Century schools would be a logical place for "production scale" application.
- Teacher salary increases implemented with the accountability system. While Utah's teaching salaries are competitive with neighboring states, the EEC feels that increased pay tied to increased accountability and increased results is appropriate. Implementation could be teacher-by-teacher, school-by-school, and/or district-by-district. Value-added metrics make it possible to adjust for different teaching environments and challenges.
- Increased deployment of information technology in teaching. In addition to preparing our students for an increasingly technological future, this will lay the foundation for a strategic shift towards competency-based education processes for core academics, allowing Utah to be the leader in cost-effective, results-driven public education.

To find these resources, the EEC recommends that a "must have" versus "nice to have" philosophy be employed again, this time for the overall state budget. Facing the circumstances that exist today, Public Education simply cannot support all of the "nice to haves" currently in the system. Similarly, the state cannot do everything it currently does. The funds simply do not exist. The EEC recommends that several alternatives be examined as outlined below:

- Seek for savings internal to Public Education.
- Reprioritize state budget investments. Make tradeoffs within the state budget, focusing more resources on education. This implies the reallocation of the state's general fund revenues to give greater priority to education.
- · School Choice.
- Engage the private sector, particularly for R&D and pilot programs.

Savings Internal to Public Education

The first place to look for resources is internal to Public Education. The State Board and each District should constantly seek for savings and opportunities to deploy existing resources into the core mission. As discussed above, setting clear priorities is essential to effectively managing resources and the State Board and each District must be held accountable. The recommended refocusing on core academics must reduce resources used for some existing electives. Aggressive measures will need to be taken to re-deploy those resources towards the core mission. The EEC recommends that metrics be developed to measure effective deployment of resources and report back to the Legislature each year. Some examples are outlined below.

One of the most visible examples of a lack of fiscal restraint can be seen in many of the schools constructed in the state. In many cases, Utah has some of the nicest school buildings in the country, an illogical investment in the case of highly limited resources. Some schools are built for \$10,000 per student, while others are built for \$5,000 or less per student. Furthermore, many aspects of more expensive buildings (e.g. glass atriums) have higher operating costs. Once again, tradeoffs need to be made. Would we rather have nice buildings or smart kids? It appears that many districts are not effectively managing scarce resources in support of core academics. The EEC recommends that in the allocation of state funding, there should be incentives for efficient use of building resources. Some funding mechanisms should be revised to permit savings in school construction costs to be applied to instructional improvements.

Districts should look within existing budgets to seek savings. The EEC recognizes that Utah has the lowest per pupil administrative costs in the nation, but this area should be continually examined for further savings opportunities. The State Board of Education should facilitate comparisons across districts and schools to determine best-demonstrated practices that can be shared and implemented elsewhere.

The focus on internal savings must be to align spending with the core mission and constantly re-examine resource allocation to ensure optimal deployment. It is uncertain how many resources can be obtained through this realignment, but the State Board of Education and the State Superintendent, in cooperation with the Districts, should be responsible to develop re-allocation estimates.

Reprioritize State Budget Investments

As seen in Figure 3 on the following page, Utah's investment in Public Education (K-12) as a percent of overall spending has declined from 31.6% of state and local own source spending in 1991 to 28.5% of state and local spending in 1999. In 1995, Utah was the 5th highest ranked state in the country, but as of 1999 was only 32nd.

Newer data that includes both state and local spending is not yet available (difficulties with census data), but an update covering state spending only is shown below:

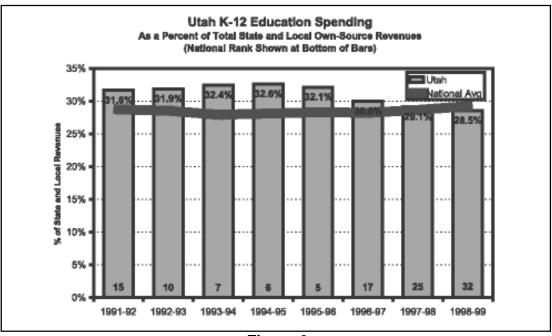


Figure 3

Figure 4 shows a downward trend in percentage of state spending on Public Education (K-12) during the 1990's, correlating with an upward trend in transportation spending. As the state spent proportionately more on transportation, it spent proportionately less on Public Education. Given recent budget pressures and the focus on education, this trend is reversing. The EEC applauds the Legislature and the Governor in making these difficult decisions. However, revenues are down and state tax revenues continue to be pressured by federal mandates and federal tax law changes. For example, Medicaid costs (driven by federal law) are projected to grow by 19%, far in excess of projected growth in tax revenues. Another example is estate taxes – because Utah's estate tax laws are linked to federal laws, the federal estate tax phase-out will reduce Utah's estate tax revenues.

In the face of an education crisis, combined with severe budget problems. Utah is faced with very difficult choices. Utah simply cannot do everything it has in the past. The funds do not exist. Either tough choices must be made in budget priorities or new revenues need to be found. The EEC recommends that everything possible be done making the tough choices with existing funds before new revenues are even considered. Making tough choices implies setting priorities. Every line item of current spending certainly has sponsors who don't want to give it up. The EEC believes that education must be the top priority given the crisis it is facing. All other budget items should be compared to the educational needs of our children. It is never easy to come up with budget reductions elsewhere, and all areas should be considered.

A first consideration should be transportation. The EEC recommends that Utah defer some planned road improvements, shifting funds

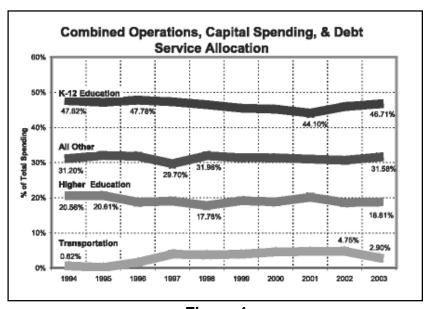


Figure 4

currently targeted for transportation to bridging budget deficits and to Public Education. Utah made a much-needed investment in infrastructure over the past decade, but now needs to reinvest proportionally in education. In particular, the EEC recommends that transportation projects be reviewed on a "must have" versus "nice to have" basis. Such an approach could generate as much as \$106 million.

All other budget areas should also be considered, using a "must have" versus a "nice to have" discipline. The EEC acknowledges the tremendous challenge facing the Legislature in these difficult financial times, but encourages the tough choices to be made.

School Choice

Several initiatives are underway that have appropriately expanded school choice including the ability to move within the public school system, charter schools and the New Century schools. While these initiatives are somewhat new, they are a step in the right direction and should be closely tracked and expanded where possible, focusing on support of the core mission: cost-effective achievement in core academic subjects. However, the EEC believes there are far more benefits to be gained through significantly expanding school choice.

Recommendations

The EEC believes school choice provides several benefits to Public Education and recommends that the private sector be engaged to assist in facing current and pending challenges. The EEC would like to see significant growth in school choice/private schools for three principal reasons. First, the EEC believes that the expansion of school choice will allow parents to have more selections to meet the needs of their particular children. Many times these needs are not best met in their local school. Second, school choice creates more competition, which the EEC believes will drive increased performance across all institutions. Third, as Utah struggles with exploding enrollment growth and required funding, the EEC believes the private sector should be engaged to shoulder some of this burden. The Public Education system would still experience significant growth, with the objective that the private sector takes a portion of the expansion.

Every child must be given the opportunity to obtain the best education possible in kindergarten through high school (K-12). The focus that the EEC proposes is a priority on the individual child, not on the institution. If a child is not obtaining the highest standard of education possible, then the parent or guardian possesses the responsibility to choose the optimal format or setting for that child that provides him or her best chance to succeed. The option to choose the optimal format should be available to the parent regardless of income level. If a child gets left behind in the fourth grade, then that individual stands at risk to be impaired for life, and perhaps trapped in a cycle of poverty that may be detrimental not only to him or her, but tohis or her future children as well. School and district policies regarding student transfers should be reviewed to help parents find the right educational environment for their children.

While it is contemplated that the needs of the vast majority of children can and will be met by the public education system, it is only reasonable that no single format fits the needs for all. For those individuals who for cultural, academic, personal or other reasons, find themselves at risk of educational peril in the public system, they should be provided a tax credit for an amount that is adequate to provide private education. If by doing so those children are able to improve their education, that act will be of inestimable benefit to those individuals, to their families and to society as a whole.

The business members of the EEC live in a world of competition, recognizing that it pushes all to perform to higher levels of efficiency and in meeting the needs of customers. The process of allowing the various schools to compete for students can unleash new creative energy and innovation that has always characterized the competitive arena. The EEC sent individuals to Milwaukee to see first hand the longest and most comprehensive experience with vouchers. The EEC also reviewed various reports on successes and shortcomings of vouchers or tuition tax credits across the country. The conclusions of this analysis are best summarized by Harvard professor Caroline M. Hoxby ("School Choice and School Productivity (Or, Could School Choice Be a Tide That Lifts All Boats?), February, 2001, Harvard University and National Bureau of Economic Research, Inc.). One of her key insights is that the competition engendered by school choice raised the productivity of all schools facing increased competition, not just those "chosen" by students and their parents.

"If all schools in the United States experienced high levels of the traditional forms of choice, school productivity might be as much as 28 percent higher than it is today...In...the paper, I present evidence on three recent choice reforms: vouchers in Milwaukee, charter schools in Michigan, and charter schools in Arizona. In each case, I find that regular public schools boosted their productivity when exposed to competition...In each case, the regular public schools increased the growth rates of their productivity by raising achievement, not by lowering spending."

To accomplish these objectives, the EEC recommends the adoption of a refundable tuition tax credit, structured in a way that *creates* funding for the public school system. The primary mechanism to accomplish this objective is to provide a tax credit of \$3,000 (for lower income families) or \$2,000 (for higher income families). The \$3,000 credit is targeted to be generally sufficient to secure a private education for lower grade level students.

A recent survey conducted by the EEC indicated that 88% of private schools surveyed have tuition below \$3,500 in the lower grades, with the median tuition being \$3,300. The weighted average tuition rate, for K-6th grade private schools surveyed, was approximately \$4,500. However, this result was affected by a handful of private schools with relatively high tuition rates and large enrollments. If the three most expensive private schools are excluded from the sample, the remaining 22 private schools comprising 83% of the private school enrollment population surveyed, had a weighted average tuition rate of approximately \$3,400.

Public Education will save money for each student electing to move to private schools—an approach that works in an environment of growth. It is estimated that for every new student in the public school system, the incremental cost to state government will be between \$4,120 and \$5,000, most likely approaching the larger number over the long run. With up to 100,000 new students anticipated over the next decade, this represents an increase in funding requirements of almost \$500 million in real terms, a number the state is ill equipped to deal with in these difficult economic times. A new student who attends a private school will save the difference between \$4,120 to \$5,000 and the \$2,000 to \$3,000 tax credit. The challenge in the short run is integrating the roughly 15,000 students currently enrolled in private schools into the system. If these "prior" students were to be given the credit on day one, it would create a cost to the state of \$30 to \$40 million, something Utah cannot yet finance with the savings mentioned above. Therefore, the EEC recommends that the credit for prior students not be allowed. The expected financial benefit will be a function of the growth in private schools. It is hard to predict the growth of private schools with the benefit of tuition tax credits, but if they grow from the existing 15,000 students today to 50,000 students 10 years from now, the cumulative savings to Public Education will be \$50 - \$100 million, with the range based on estimates of the true full costs of incremental students. Such a result would not only be a financial benefit to the state, but would also take a substantial portion of the growth burden from Public Education while fostering innovation in both public and private schools.

The EEC recommends the tuition tax credit be refundable to make it easier for lower income families to participate. "Refundable" means that lower income families who don't pay enough taxes to take full advantage of the tax credit would receive a tax refund from the state, giving them the same economic benefits as those in higher tax brackets. Many disadvantaged children may be better off selecting a specialized environment that some private schools may be more effective in providing. In the face of potentially increasing remediation needs due to "No Child Left Behind" and increasing diversity in our schools, this benefit is particularly noteworthy.

The EEC also recommends that in order for private schools to participate in the tuition tax credit program, they should be required to publish comparative test results that can help parents select the most appropriate education for their children. For example, by having private school tests and the public school's UPASS tests both correlated with Stanford Achievement Tests (SAT-10), parents will have the data necessary to make fully informed choices.

The EEC plans to endorse carefully developed legislation for refundable tuition tax credits based upon economic models that ensure savings occur, while still retaining the benefits of expanded school choice. The EEC strongly recommends the adoption of this legislation. Tuition tax credits alone will not resolve all the issues facing Public Education today, but they are a key component of an overall solution.

The EEC also strongly endorses the initiatives of expanding charter and New Century schools and encourages even more be done. In many cases, these schools may develop new efficiencies or methods of education. Charter schools may show techniques for delivering high-quality education for lower costs. The State Board of Education must be charged with taking these learning opportunities and sharing them across all schools to achieve constant improvement.

Higher Education

Higher Education in Utah has developed certain recognized strategic assets over time, yet it suffers from the inability to follow a carefully thought out plan due to:

- a strategy that lacks the focus necessary for these difficult economic times and the pending enrollment boom,
- an ineffective management structure, and
- funding mechanisms that create wrong incentives.

The EEC developed recommendations in each of these areas.

Strategy

Current Situation

In 2000, the Utah Board of Regents developed a master plan that included the following goals:

- Contribute to a productive, competitive workforce
- Contribute to a vibrant economy
- Foster a society that seeks intellectual, social and cultural advancement

The EEC supports these goals as a foundation to a strategy that matches graduates' capabilities to the needs of the employer community, thereby benefiting both parties. The challenge is to translate these goals into practical application to attract high-paying jobs to Utah.

Utah Higher Education has developed several recognized capabilities despite the lack of a clear, integrated implementation plan. These capabilities include the bioengineering programs and the medical center at the University of Utah, engineering at the University of Utah and Utah State and agriculture at Utah State. However, the lack of a definitive actionable strategy has led to sub-optimal deployment of resources. Each college or university seeks to grow enrollment by almost any means possible since new funding is tied to enrollment growth. Examples include addition of new colleges, remote campuses or expanding from a two-year to a four-year college. New resources are then allocated to the most effective recruiting or expansion effort rather than what makes strategic sense.

Recommendations

The EEC recommends that the Board of Regents build on their previous work and develop a comprehensive strategy, based upon the following foundations:

- · Effective and efficient institutions
 - Clearly defined missions and roles
 - Develop excellence in defined role
 - World recognition in a few select disciplines
 - Improved alignment of programs with job market demand
 - Attract businesses and capital to Utah in defined areas
 - Fiscal excellence and accountability
- Competitive and productive workforce
 - Effective communications skills
 - Highly skilled—not just highly educated
 - Practical job capabilities in chosen disciplines
 - Ability to contribute, grow and develop

<u>Clearly defined missions and roles.</u> Each institution must have a clearly defined strategic role and then become excellent in that role. These strategic roles are part of an overall strategy for the education market in Utah. Institutions must not evolve their roles unless it is a clear part of the overall strategy. If every institution is allowed academic and campus creep, resources become diluted and strategies are sub-optimized. For example, two-year colleges do not need to become four-year universities; remote campuses are not cost-effective. The EEC recommends the following roles:

• The University of Utah and Utah State are Research I Institutions, and investments should be made to make them world class in a few areas—"World-Class Teaching/Research Centers," and higher quality overall. For example, bioengineering at the University of Utah already has extensive capability and should have significant further investment. These institutions should also increase quality overall, so that an undergraduate degree is a significant accomplishment. *To do so requires increasing entrance requirements and further challenging students academically.* Some exceptions may be necessary for the agricultural programs at Utah State University. An empowered management team should be able to make appropriate adjustments and still maintain consistency with the mission of "world class excellence."

- UVSC and similar schools should focus on broad access to higher education at a low cost. UVSC fulfills this role well today, costing about \$4,500 per year (versus \$10,000 for the U) and must stay within this mission. For example, expanding to Heber is costly and an inefficient deployment of scarce resources, while an expanded engineering program may be an appropriate initiative within this mission. Guided by a clear strategy, an effective management team can make appropriate refinements within the defined mission for each institution.
- Two-year schools must remain two-year schools and become the best and most cost-effective at what they do.

<u>Develop excellence in defined role.</u> Regardless of the strategic role being fulfilled, the institution must seek excellence, or to be the best in that particular role. For example, UVSC should seek to be the best in providing broad access to good quality higher education at a low cost. It should not seek to add graduate programs or campuses. Significant political pressures exist to expand missions and to establish remote campuses. Remote campuses generally add cost and consume the State's already limited resources. Why should the state invest resources to allow Dixie to become a four-year college when SUU is available? It is an inefficient use of resources. Affiliations can be created with four-year institutions where some upper class course work may be supported at two-year institutions.

World recognition in a few disciplines. At the Research I institutions, Utah should strategically focus on becoming world-class in a few areas. Trying to become world class in too many areas leads to a lack of focus and dilution of resources, resulting in an ineffective strategy. The EEC recommends that Utah develop four to six areas of world-class capability in its institutions. These areas, or "World-Class Teaching/Research Centers," should stretch our level of learning and generally be in strategic areas that will attract high paying jobs. In the words of one of the members of the EEC, "we need smart guys." In many cases, "ecosystems" will develop in partnership with these institutions in the form of new companies and venture capital, which in turn spawn other enterprises. The institutions should attract the best and brightest students and faculty in these areas as a method to enhance capabilities. Proven examples around the country demonstrate exceptional institutions and graduates can attract successful businesses. As a matter of public policy, the State should work to attract and foster businesses that result from these targeted disciplines. Utah has one of the premier bioengineering programs in the world, yet much of the research and technology that is developed in these programs migrate out of state.

Improved alignment of programs with market demand. There needs to be a strategic balance between what Higher Education institutions are producing and what the market needs, recognizing that the market includes not only businesses, but also teaching, research, public service, and many other areas. Industry should establish a standing advisory board to provide assessment and input to the Board of Regents and Legislature reporting on the market needs and how those needs are being met. Periodic assessments should be made to keep these aligned.

Attract businesses and capital to Utah in defined areas. Executing the above initiatives can lead to the ability to expand business and other career opportunities. The State and Higher Education need to collaborate in creating an environment that results in the creation of economic ecosystems that are fed by the world-class capabilities in which we are investing.

Management

Current Situation

Higher Education has the pieces in place for an excellent management process, but certain parameters must be changed to make it effective. Appointing the Board of Regents is a wise choice since the state is able to select a mix of highly capable individuals, who otherwise may not run in an election. The Board may be appointed in a manner similar to the School & Institutional Trust Lands Administration Board. The true authority of the Board of Regents today is essentially limited to selection of Higher Education presidents, since it has no funding authority.

Recommendations

The EEC recommends empowering the Board of Regents with true Higher Education strategic responsibility, including:

- Developing the strategy, consistent with the outline above.
- Funding authority (see Funding section).
- Holding Higher Education institutions accountable for performance as part of the strategy, including tracking specific performance metrics.

- Reporting annually to the State Legislature on an overall strategy and annual performance relative to the strategy.
- Continuing authority for selection of presidents.

Funding

Current Situation

The current funding process has no relationship to any strategy and *must be changed*. Currently, funding basically falls into two areas. First, keep what the institution had last year. Second, allocate new money based on enrollment. The new money this year then becomes part of next year's base. Institutions are funded based upon spending the budget this year and increasing enrollment as much as possible to win new funding. This model rewards inefficient spending and the adding of students regardless of whether those students are part of any larger strategic interest. The incentive is to grow enrollment, whether it makes sense or not. This creates behaviors manifested in growth at almost any cost, whether it includes expansion to four-year status, adding remote campuses, or adding new areas of study, regardless of whether it is the best system-wide application of resources. The result is duplicated efforts, wasted resources and a dilution of educational excellence.

Furthermore, additional funds will be needed to execute the strategy outlined above. Developing the "World-Class Teaching/Research Centers" and increasing the overall quality of the Research I institutions will require resources to truly become world class. Funds are not readily available from the state budget, but existing resources should not be cut. However, other funding sources can be utilized to implement the strategy. Seeking donations from individuals, foundations and businesses should be encouraged. In the area of tuition, Utah's out-of-state tuition is appropriately set at the full operating cost, but Utah's in-state tuition is relatively low and is a potential source of funding.

Recommendations

- The funding mechanisms need to be aligned with strategy. This is the single most important recommendation for Higher Education, as it will drive the whole system. Unless this changes, any other recommendations are likely to be ineffective. The EEC proposes:
 - The Board of Regents should have full funding authority for all funds. The Board can deploy the funds consistent with the overall strategy. The current practice of proportional funding must be changed, which will require a new level of fiscal discipline.
 - Each institution should develop a zero-based budget, followed by annual strategic reviews. Many programs that no longer make sense continue from year to year because there is no mechanism to revisit them. The zero-based budget should be developed by the institution and presented to the Board of Regents. The budget should focus on fulfilling the strategy for that institution, consistent with the overall Higher Education strategy.
 - The Higher Education institutions should show fiscal responsibility and have metrics to measure effectiveness. The Board of Regents should have two to three full time financial employees to assist in reviews of financials and metrics.
- Increase tuition to comparable rates of surrounding states. Utah has very limited resources and cannot afford the comparatively high subsidy of Higher Education. On average, Utah's in-state tuition is \$2,520 compared to \$3,281 of WICHE (Western States) and \$4,260 in the U.S. Utah has the 8th lowest tuition in the nation yet has comparatively limited resources on a per capita basis. The EEC recommends Higher Education raise tuition to the median of comparable schools in its cohort states (western states excluding California) over a three-year phase-in period. This would raise \$61 million per year, assuming level enrollment. The bulk of these funds should be re-invested in the Higher Education, particularly in developing the "World-Class Teaching/Research Centers."
- <u>Dedicate a portion of the tuition increase to assist low-income students</u>. In order to assist those who are least able to pay to break the chain of poverty, a portion of the revenue resulting from tuition increases should be dedicated to student aid. Utah is relatively low in student aid and with a tuition increase, this aid should be expanded.
- Reduce construction costs and re-allocate the funds to the core mission. Like Public Education, Higher Education has tended to over-build, which cannot continue in difficult economic times such as these.

Admissions

Current Situation

The current admissions efforts of the Universities are driven to attract enrollment, not necessarily ensure excellence. For example USU regularly waives its admission pre-requisites in order to increase its enrollment. The State must do a better job of preparing college bound students. Current K-12 graduation requirements are significantly less rigorous than the better educational systems in the country. Additionally, entrance requirements at Higher Education institutions can be adjusted to bring better prepared students into the system. Such adjustments must begin with the counseling of 9th grade students. Some of the current issues are:

- Correlation between K-12 and higher education graduation requirements, definitions of subject competency, and curricula, all need improvement.
- 16% of first time freshman under 22 and 19% of first time freshman over 22 take remedial coursework costing state subsidies of \$3.1 MM annually.
- Remedial placement guidelines vary dramatically across institutions.
- Average graduate requires 120% of required hours to graduate, driving up costs.
- A focus on "seat time" instead of competence results in wasted academic time to complete class-time requirements instead of demonstrated capabilities.

Recommendations

- Build upon the General Education Committee's "What is an educated person?" efforts for K-16 and, where possible, implement competency-based curricula to eliminate competent students repeating coursework in which they have demonstrated capability. By increasing articulation/alignment efforts, take maximum advantage of the efficiencies offered by concurrent enrollment programs in Utah's high schools.
- Increase entrance prerequisites at Utah & USU to demonstrated competencies of 4 years English, science and mathematics with 2 years foreign language, and co-ordinate related communications with Utah's high schools. Additionally, Utah and USU should "raise the bar" of academic performance to elite levels, making it more difficult to enter and more difficult to stay, even at the risk of declining enrollment in the short term. When funding becomes "strategic", enrollment numbers are no longer critical. Become truly "world-class."
- Increase entrance prerequisites at WSU & SUU to demonstrated competencies of 4 years English & Math, 3 years Science and 1 year foreign language.
- Increase entrance prerequisites for other institutions to demonstrated competencies of 4 years English and 3 years science and math.
- Work with K-12 educators to stage implementation to allow students time to prepare for this new program.
- Implement necessary changes so recent high school graduates require no remedial coursework.
- Establish consistent remedial placement guidelines based upon ACT or COMPASS results. Make all remediation programs user-funded.

Other Recommendations

- Develop "feeder" relationships between higher education institutions to facilitate movement of students. Develop links between "magnet" and charter schools, two-year institutions with higher education institutions.
- Explore and pilot the use of emerging virtual campus technologies and implement those technologies that maintain or enhance quality while lowering costs.

- Develop partnering relationships between businesses and each higher education institution. Share best practices such as the Center for Chemical Research at WSU. Solicit businesses to create scholarship and internship opportunities for the best and brightest students in targeted disciplines.
- Charge out-of-state tuition rates for students who exceed 135% of the required hours for graduation.
- Enforce entrance requirements, especially for Research I institutions.

Applied Technology Education (ATE)

The EEC devoted modest resources to examining applied technology education, which has three parts: 1) applied technology education at the high school level, under the auspices of the State Board of Education; 2) UCAT, which now falls under the Board of Regents; and 3) applied technology courses at other (non-UCAT) higher education institutions. The UCAT budget is about \$50 million per year, and under the State Board of Education another \$52 million of state funds (incremental to the basic WPU) is expended. These funds "pull through" another approximately \$13 million of federal funds. Utah's other (non-UCAT) colleges and universities have ATE expenditures totaling approximately \$97 million.

While the *concept* of applied technology education is appealing:

- Job/career preparation;
- Improving job skills;
- Matching supply and demand in the job market;
- Assisting students who don't fit a four year degree program;
- Competency-based education at UCAT, allowing student to progress at their own maximum rates.

The implementation seems to suffer from problems similar to those facing Public Education and Higher Education:

- Lack of a clear mission. Undoubtedly due to a myriad of multi-faceted demands, ATCs seem to be tackling several areas simultaneously
 - Applied technology education and training for high school students
 - High school equivalency education for adults
 - ESL (English as a second language) for adults
 - Applied technology education and training for adults
 - Two-year college degrees (Associate of Applied Technology) in selected fields
 - State-subsidized employee training for local businesses ("Custom Fit")
 - Competency-based education (in UCAT).
- Due to per pupil funding mechanisms, there may be a focus on increasing enrollments, which in turn can lead to a proliferation of course offerings that don't necessarily fit the job market.
- Again, due to per pupil funding policies, a high potential for conflict exists among the three providers of ATE in search of enrollment.
- Local control may not be synchronized with state objectives. However, this is understandable, given the lack of clear state objectives.
- Tendency to believe that "bigger is better", which leads to over-building in terms of programs and services as well as facilities.

Recommendations

The EEC believes that applied technology education can and does perform a valuable function, but that it can be implemented in a more streamlined and cost-effective manner appropriate for these difficult economic times. Major recommendations are as follows:

- Change funding policies to match the new focused strategies for Higher Education and Public Education as outlined in this report:
 - Higher Education funds for UCAT should be allocated strategically by the Board of Regents, with UCAT filling its assigned role in the Higher Education strategy.
 - Along with other "non-core" electives, ATE funds within Public Education should be conserved as much as possible and re-directed by the State Board of Education towards accomplishment of the core mission: improved performance in core academics.
- Applied Technology programs should become better aligned with the Utah job market, using more stringent job market-based criteria for course offerings. The EEC sub-committee found that course offerings and enrollments seemed to be dictated more by student and faculty interests than by job market demand. A set of criteria should be established, such as:
 - High demand in job market
 - Wage rates over a certain threshold
 - "Strategic" nature of industry to Utah economy (e.g. attract other jobs to state)

If the above criteria were applied, ATC investment in the following areas would be subject to closer scrutiny: agriculture, cosmetology, dental assistant, child care, culinary arts, fashion merchandising, jewelry fabrication, and travel & tourism. These programs account for more than 15% of the current membership hours (excluding Custom Fit).

Applied technology education (high school, UCAT, and other Higher Education institutions) should seek for more efficient
operation through consolidation of vocational training equipment and classrooms to strategic geographical locations
throughout the state. Vocational training classes typically have high equipment costs and small class sizes; hence opportunities
for consolidation should be explored and exploited.

Appendix A

Participants on the Employers Education Coalition

Project Leaders

Fraser Bullock Chairman COO, Salt Lake Organizing Committee

John Bennion Project Coordinator Managing Director, SLOC

Steering Committee

Dinesh Patel Partner, vSpring Capital

Paul Ross CEO, ATK Alliant Techsystems
Teresa Beck former CEO, American Stores

Fred Lampropoulos CEO, Merit Medical Kelly Matthews Sr. VP, Wells Fargo Bank

Business Leaders

Craig Bickmore Utah Automobile Dealers

Tom Bingham & Debra Johnson

Mac Brubaker

David Clark

Greg Fredde

Utah Manufacturers Association

Utah Association of Realtors

Utah Life Sciences Association

Utah Mining Association

Guy Fugal Associated General Contractors Ruland Gill & Mike Jerman Utah Taxpayers Association

Robert Grow & Jim Clark Envision Utah

Rick Kinnersley Utah Hospital Association

Tim Layton & Brent Robinson Venture capitalists, Alpine Consolidated

Jim Olsen & Dama Barbour Utah Food Industry Flint Richards & Wes Quinton Utah Farm Bureau

Chris Roybal Economic Development Corp. of Utah
Jack Sunderlage Utah Information Technology Association
Jan Zogmaister Utah Federation of Independent Businesses

Craig Zollinger Utah Bankers Association

Education Leaders

Kim Burningham Chairman, State Board of Education

Susan Dayton President, Utah PTA
Helen Handley Weber State University
Charles Johnson Board of Regents

Rich Kendell Governor's Office (former Davis School District Superintendent)

Steve Laing State Superintendent of Public Instruction

Bill Moore Utah School Boards Association

Barry Newbold School Superintendents Association (Jordan School District Superintendent)

Pat Rusk President, UEA

Paul Thompson President, Weber State University